Publication History and Lectotypification of Mentzelia arborescens (Loasaceae)

Maximilian Weigend

Institut für Biologie, Systematische Botanik und Pflanzengeographie, Freie Universität Berlin, Altensteinstr. 6, D-14195 Berlin, Germany. weigend@zedat.fu-berlin.de

ABSTRACT. The confusing publication history of the name Mentzelia arborescens Urban & Gilg is clarified. The first publication of the name by I. Urban in 1892 referred only to a floral diagram and should not be considered as valid publication. Subsequently, the name was taken up by E. Gilg in 1893 in Die natürlichen Pflanzenfamilien and described in detail as the only representative of the newly described Mentzelia L. sect. Dendromentzelia Urban & Gilg. This should be considered as the valid publication of the name. The material seen by the authors, however, was not cited in publication until 1900. A search for the original material led to the discovery of two Karwinski specimens in the Munich herbarium (M). which bear handwritten labels by Urban and Gilg dated 1892, and are therefore suitable as lectotypes of the name. One of them is here formally designated as the lectotype.

Key words: Loasaceae, Mentzelia, typification.

Mentzelia arborescens Urban & Gilg is the only species of Mentzelia L. sect. Dendromentzelia Urban & Gilg and appears to be a rare and narrowly endemic species restricted to southern Mexico (Oaxaca; Darlington, 1934). In preparation of the Flora Mesoamericana treatment of Loasaceae, a formal typification of the name and a clarification of the valid publication date are required.

The name Mentzelia arborescens was used in three publications of I. Urban and E. Gilg (Gilg. 1893; Urban, 1892; Urban & Gilg, 1900). Usually, M. arborescens is cited as published in Urban and Gilg (1892: 265, t. 14, fig. 8; cf. Darlington, 1934), but a study of the original publication reveals that the name is there only used in the legend of a table with floral diagrams, without any further description, nor citation of a specimen.

This designation may therefore be considered as a nomen nudum. A validating description of the taxon was provided in Gilg (1893) in his treatment of Acknowledgments. I am indebted to H.-J. Esser of Loasaceae in Die natürlichen Pflanzenfamilien, where he described unispecific Mentzelia sect. Dendroment-

zelia in detail, with M. arborescens. Gilg explicitly gave Urban & Gilg as the authors of this species, despite the fact that he figured as sole author for this article. This publication should be considered as validating the species name. Mentzelia arborescens retains priority, because the only synonym of M. arborescens, M. conzattii Greenman, was published in 1897. Not until Urban and Gilg's Monographia Loasacearum (1900) is there finally a published reference to those specimens the authors had seen of M. arborescens.

Mentzelia arborescens is based on six collections. all from from Oaxaca, Mexico (C. Conzatti 62, H. Cuming s.n., C. A. Ehrenberg 1297, H. Galeotti 3682, A. Ghiesbrecht s.n. [these not located], and W. Karwinski s.n.). In the author's search for the original material, two specimens by Karwinski were located in the Munich herbarium (M). These specimens were cited by Urban and Gilg (1900) and bear hand-written labels by those authors dated to 1892. They may therefore be regarded as relevant choices for the original material for M. arborescens, and one of these two specimens, the more complete and better-preserved specimen (several flowers open and well preserved vs. in bud or moth-eaten in the other specimen), is here selected as the lectotype of that name. It is very likely that both specimens correspond to a single gathering, but they lack collection numbers and the labels are marginally different.

Mentzelia arborescens Urban & Gilg, in Engler & Prantl, Nat. Pflanzenfam. III(6a): 110. 1894. TYPE: Mexico. [Oaxaca:] s.d., W. Karwinski s.n. (lectotype, designated here, M). Figure 1.

Mentzelia conzattii Greenman, Proc. Amer. Acad. Arts 32: 298. 1897. TYPE: Mexico. Oaxaca: Oaxaca, 1500 m. 19 Dec. 1906, C. Conzatti 62 (GH).

Additional specimen examined. Mexico. | Oaxaca: | Teoxomulco, W. Karwinski s.n. (M).

the Botanische Staatssammlung München (M) for facilitating high-quality scans of the Karwinski

NOVON 17: 270-271. PUBLISHED ON 20 JUNE 2007.



Figure 1. Lectotype specimen of Mentzelia arborescens Urban & Gilg: Karwinski s.n. (M).

specimens and to Kanchi Gandhi (GCI) for helpful suggestions on the manuscript.

Literature Cited

Darlington, J. 1934. A monograph of *Mentzelia*. Ann. Missouri Bot. Gard. 21: 103–226.

Gilg, E. 1893. Loasaceae. Pp. 100–121 in A. Engler & K. Prantl (editors), Die natürlichen Pflanzenfamilien III(6a). Urban, I. 1892. Blüten und Fruchtbau der Loasaceen. Ber. Deutsch. Bot. Ges. 10: 259–265.

———— & E. Gilg. 1900. Monographia Loasacearum. Nova Acta Acad. Caes. Leop.-Carol. German. Nat. Cur. 76(1): 1–368.